OPERATING INSTRUCTIONS

AUDIO MIXER
MX995

INKEL

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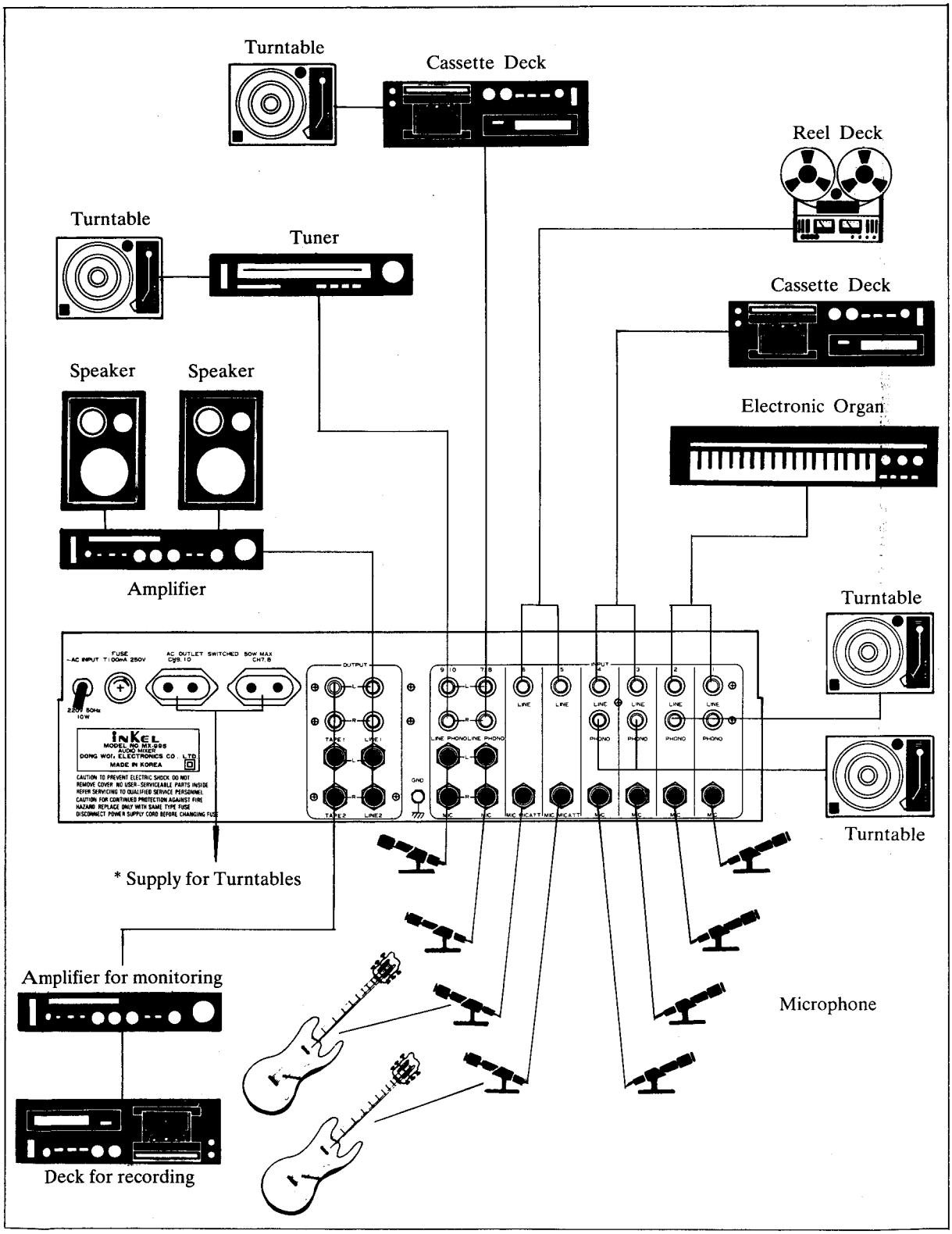
Unpacking and Installation

Although it is neither complicated to install nor difficult to operate your Audio Mixer, a few minutes of your tim is required to read this manual for a properly wired installation and becoming familiar with its many features and how to use them.
Please take a great care in unpacking your mixer and do not discard the carton and other packing materials. They may be needed when moving your set and are required if it ever becomes necessary to return your set for service.
Never place the unit near raditors, in front of heating vents, to direct sun light, in excessively humid or dusty location to avoid early damage and for your years of quality entertainment.
Connect your complementary components as illustrated in the following page.

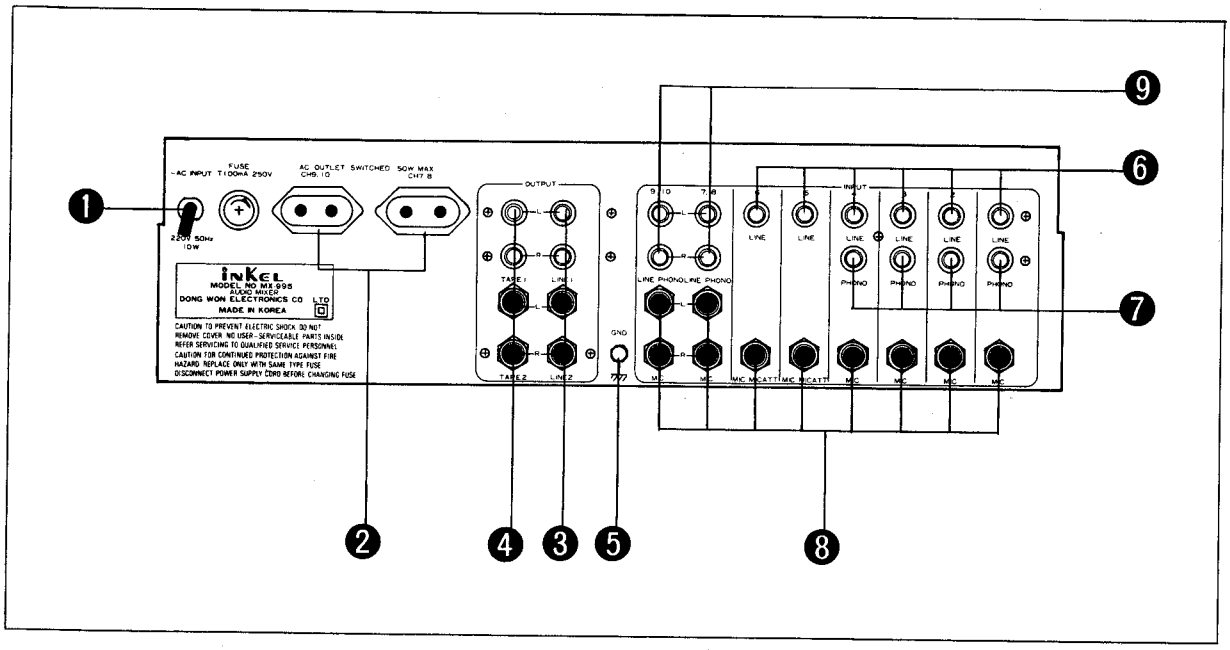
Features of Audio Mixer MX-995

- 10 channel input and 2 channel output amplifiers are incorporated.
  Any sound source of microphone, turntable, cassette deck and electric guitar can be applied to this 10 channel inputs and newly developed circuitry is providing low distortion (THD 1KHz 0.03%) and high signal to noise (S/N) ratio.
- Tone Control System
  Adjustment of BASS and TREBLE controls for the accoustic characteristics of microphone, speakers and room structure.
- Panpot for Stereo Effect
  You can distribute the signal level from microphone and electric guitar as monophonic sources between left and right channels to make a stereo sound effect.
- Function of Echo
  To make natural and wide effect of echo sound, this mixer employs BBD (Bucket Brigade Devices) IC. You can adjust the time interval of echo (40m Sec ~ 0.4 Sec), frequency and the level of echo volume from each channel to make sufficient echo effect as you want.
- Input and Output Monitoring
  You can monitor the input and output signals by headphone with MONITOR SELECTOR switch very conveniently.
- Function of Electro-Start
  Channel 7, 8 and 9, 10 input volumes are provided with electro-start function to control AC power automatically to the AC outlet on the rear panel.

Rear Panel Connections



Rear Panel Connections (Continued)



1. AC INPUT CORD

Plug this AC INPUT CORD into AC outlet.

2. AC OUTLETS FOR TURNTABLES (Optional)

You can turn the turntables which are connected to this outlets ON or OFF by using the electro-start function of CH 7/8, 9/10.

3. LINE OUT 1, 2

Singal from these LINE OUT jacks is to be connected to AUX jacks or TAPE IN jacks if necessary on the amplifier.

4. TAPE OUT 1, 2

These output jacks are auxiliary of LINE OUT jacks and can be connected with monitor amplifier or tape recorder.

5. GND TERMINAL

This terminal is to be connected to the ground terminal of turntable to reduce hum to minimum.

6. LINE INPUTS

These input jacks are to be connected with output jacks of tuner, cassette deck and electronic organ. If the signals are stereophonic, you can connect left and right channel signals with independent inputs and adjust PANPOT controls to the left and right ends.

7. PHONO INPUTS

Inputs 1 to 4 are provided to be connected with magnetic cartridge type turntables.

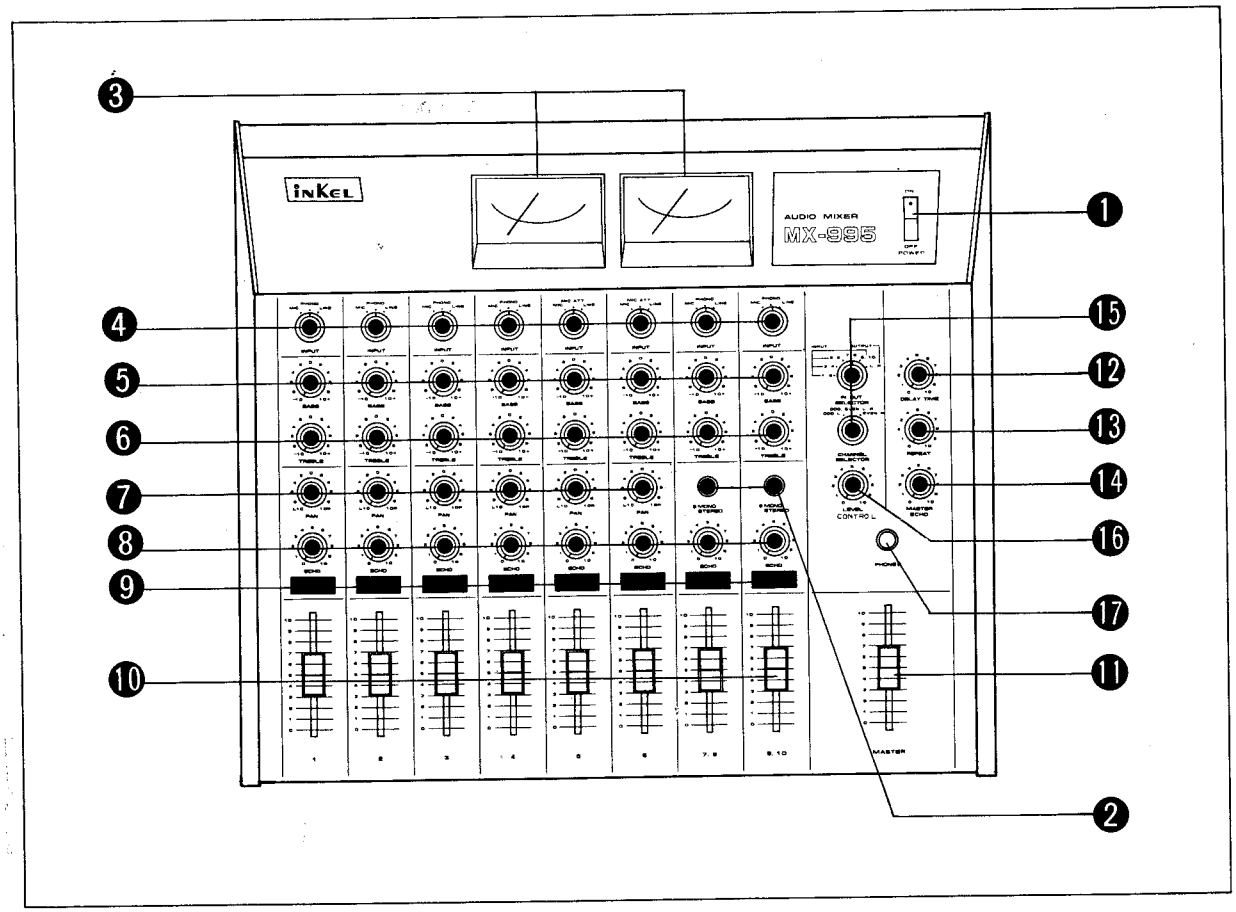
8. MIC INPUTS

These inputs are to be connected with microphones and electric guitars. You can attenuate the sensitivity by positioning INPUT SELECTOR to MIC ATT.

9. LINE/PHONO STEREO INPUTS

These input jacks are to be connected with stereo output jacks of tuner, cassette deck and electronic organ, or magnetic cartridge type turntables.

Front Panel Controls



1. POWER SWITCH

To turn the mixer ON or OFF, press the upper part or lower part of this switch button.

2. MONO/STEREO SELECTOR

You can control the mode mono or stereo by this button according to the program source.

3. VU METERS

Indicate the output level and the red colored region shows overloaded level.

4. INPUT SELECTOR

This switch is used for selecting the appropriate sensitivity level of LINE/PHONO/MIC input.

PHONO; Use this position when you want to mix the line output of tuner , tape deck or electronic organ with other signals. In this position, the level is attenuated to 50dB compared with MIC position.

PHONO; Use this position from mgnetic turntables. The level is attenuated to 6dB compared with MIC position.

MIC; Use this position for microphones or electric guitars.

MIC ATT; Use this position for low sensitive indoor microphones or electric guitars. The level is attenuated to 20dB compared with MIC position.

5. BASS CONTROLS

You can modify the low frequency sound as much as ±10dB at 100Hz.

6. TREBLE CONTROLS

You can modify the high frequency sound as much as ±10dB at 10KHz.

7. PANPOT CONTROLS

You can distribute the signal level from microphone and electric guitar as monophonic sources between left and right channels to make a stereo sound effect.

8. ECHO LEVEL CONTROLS

You can adjust echo level of individual channel. When echo is not in use, please set these controls at the minimum positions.

9. NAME PLATES FOR INDICATION OF EQUIPMENTS

You can fill in these white plates with the names of equipments which are connected to the relevant channels.

10. INPUT LEVEL VOLUME

This is used for adjusting the volume of signal sources which are connected to the relevant channels.

11. MASTER LEVEL VOLUME

This is used for adjusting the volume of finally mixed sound.

12. ECHO DELAY TIME

This is ued for adjusting the time interval of echo repeat. "0" position gives approximately 0.04 sec and "10" position gives 0.4 sec.

13. ECHO REPEAT CONTROL

You can adjust frequency of echo repeat. "0" position gives once and "10" position 7~8 times of echo repeat.

14. ECHO MASTER CONTROL

You can adjust the volume level of echo as a whole. When the echo is not in use, please set this control at the minimum position.

15. MONITOR SELECTOR

You can monitor input or output signals by selecting input channels or ouput channels.

16. MONITOR LEVEL CONTROL

This is used for adjusting volume level of headphone monitoring.

17. HEADPHONE JACK

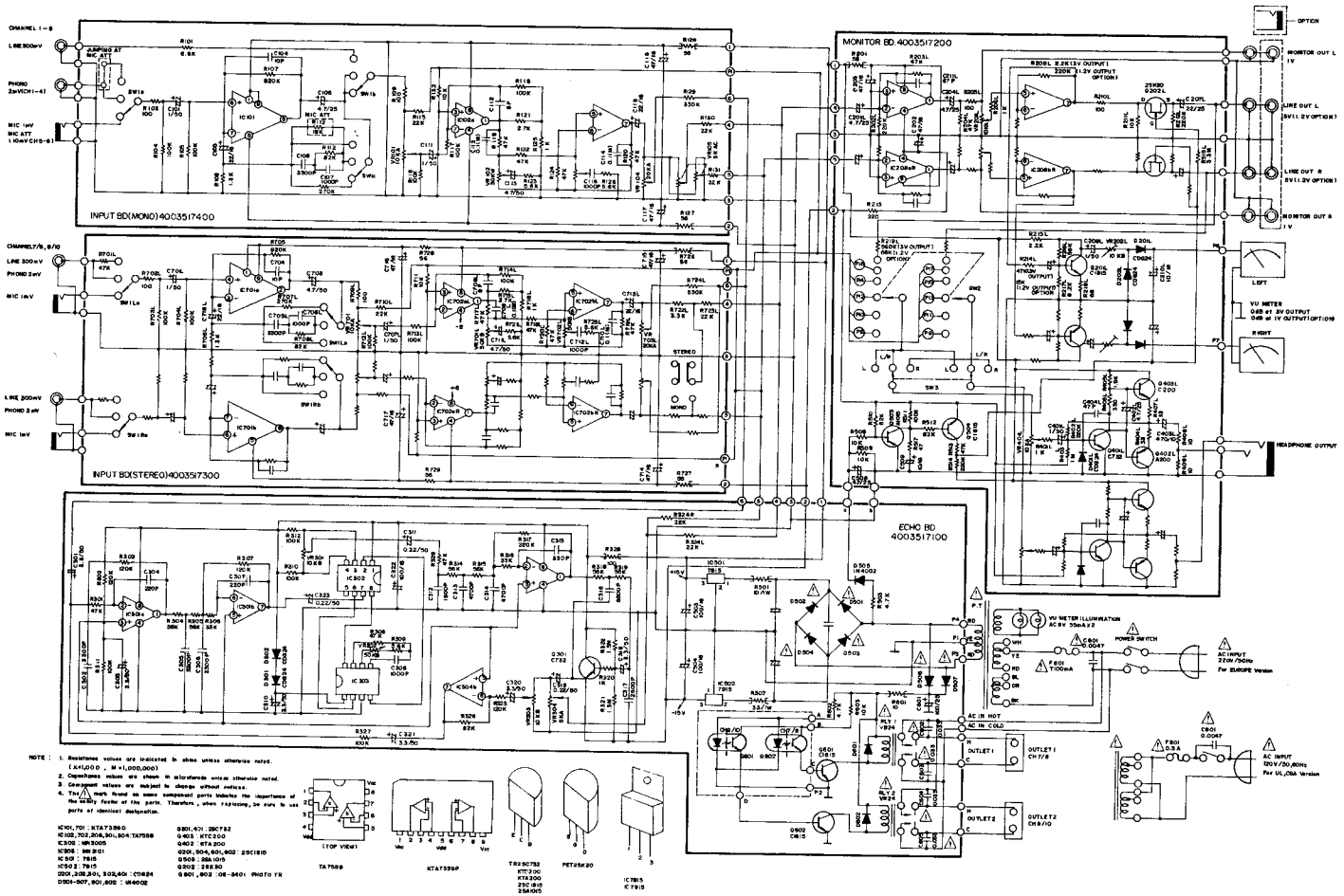
This jack is used for headphones when you are monitoring.

Specifications

RATED OUTPUT VOLTAGE	1.2V (1.5V option)
PHONO AT 1KHz 2mV	
MIC ATT 1KHz 10mV	
LINE 1KHz 300mV	
MIC 1KHz 1mV	
MAX OUTPUT VOLTAGE AT 1KHz WITH NO MORE THAN 0.06% THD	7V
TOTAL HARMONIC DISTORTION AT 20Hz-20KHz RMS OUTPUT	0.03%
FREQUENCY RESPONSE AT –3dB	
MIC ATT	15-30KHz
LINE	15-30KHz
MIC	15-20KHz
INPUT OVERLOAD AT 1KHz CLIPPING POINT	
PHONO	100mV
MIC ATT	500mV
LINE	15V
MIC	50mV
S/N RATIO (IHF "A" WTD/UN WTD)	
PHONO	72/65dB
MIC ATT	76/70dB
LINE	76/70dB
MIC	61/58dB
TONE CONTROL	
BASS AT 100Hz	±10dB
TREBLE AT 10KHz	±10dB
PHONO EQUALIZATION 30Hz-15KHz	RIAA ±1dB
HEADPHONE OUTPUT AT 1KHz 8 OHM LOAD	1.5mW
ECHO EFFECT	
DELAY TIME	0.04-0.4 sec
ECHO REPEAT	1-7 times

NOTE: Specifications and the design subject to change without notice for improvements.

Schematic Diagram



NOTE : 1. Resistance values are indicated in ohms unless otherwise noted.
(K=1,000 M=1,000,000)
2. Capacitance values are shown in microfarads unless otherwise noted.
3. Component values are subject to change without notice.
4. The △ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

IC101, 701 : KTA7396D
IC102, 702, 203, 301, 304: TA7556
IC302 : MN3005
IC303 : MN3101
IC501 : 7815
IC502 : 7915
D201, 202, 501, 502, 601 : CD624
D501~507, 801, 802 : IN4002

Q301, 401 : 2SC732
Q403 : KTC200
Q402 : KTA200
Q201, 504, 601, 602 : 2SC1815
Q503 : 2SA1015
Q202 : 2SK30
Q801, 802 : DE-3401 PHOTO TR